

University of Groningen

Visualization, classification and quantification of coronary atherosclerotic plaque using CT soft- and hardware phantom models

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Stellingen

Behorend bij het proefschrift

Visualization, Classification and Quantification of Coronary Atherosclerotic Plaque using CT Soft- and Hardware Phantom Models

1. A combination of quantitative and qualitative analysis may reliably rule out artefact-induced stenosis. (*chapter 2 of this thesis*)
2. The non-visibility of an object does not prove its non-existence. (*chapter 3 of this thesis*)
3. Despite the seemingly random published HU-based non-calcified plaque characterization criteria, specific trends can be found for each study characteristic separately. (*chapter 4 of this thesis*)
4. HU-based non-calcified plaque characterization should not be used in a clinical setting without adjustment to the local situation (*chapter 4 of this thesis*)
5. Accurate non-calcified coronary plaque characterization is currently impossible without higher spatial resolution. (*chapter 5 of this thesis*)
6. HU-based plaque lipid fraction determination may serve as a promising alternative technique to characterize non-calcified plaque. (*chapter 5 of this thesis*)
7. Lumen contrast-enhancement severely affects non-calcified plaque visualization. (*chapter 5 and 6 of this thesis*)
8. Lumen contrast-enhancement has a quantifiable pattern which can be used for correction. (*chapter 6 of this thesis*)
9. To come to an accurate non-calcified plaque characterization in clinical practice, matching HU-criteria and correction of lumen contrast enhancement influence are mandatory. (*chapter 4 until 6 of this thesis*)
10. Working in an inter-disciplinary field makes it challenging to find the balance between clinical and technical, especially in the reporting of the research results.
11. Experimenting with microCT images with very high resolution is a serious threat to any deadline.
12. According to the Dutch Immigration and Naturalization office a one year age difference can be as much as € 14.000.
13. Good critics stimulate like a fertilizer, bad critics trim like a scissor; both are needed in balance to grow a good thesis.

Wisnumurti Kristanto
1 oktober 2012